IMPACT OF INSOMNIAC PROBLEMS AND INTERNET, SMART PHONES ADDICTIVE BEHAVIOUR OF YOUTH ON THEIR PROCRASTINATION, TASK PERSISTENCE AND ACADEMIC PERFORMANCE

A

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1.1.0 INTRODUCTION:

Today, technology has become an irreplaceable part of our lives. Especially mobile technologies and the use of smart phones are rapidly becoming widespread. Our lives have become easier and many daily activities can be performed more easily thanks to smart phones. In addition to communication, individuals can have many applications such as social networks, address book, data storage unit, video camera, video player, navigation and recently online banking and applications for buying or booking all kinds of tickets in a single smart phone. Moreover, the prevalence of mobile internet, availability of Wi-Fi, increasing capacity of mobile phones and a decrease in the prices could be the reasons for the widespread use of smart phones. According to Internet and Social Media User statistics prepared by We Are Social (2015), the number of internet users in 30 countries including Turkey has increased by 525 million people compared to last year and this result indicates that 3 billion people across the world have access the Internet.

The smart phone industry in India is a growing market with with around 36 percent of all Indian mobile user expected to own a smart phone by 2018. The global smart phone penetration forecast shows that around 50 percent of mobile user world- wide are projected to own a smart device by 2018.

. As it can be seen, the prevalence of smart phones and wireless internet increases the use of both internet and smart phones. Mobil devices are more widely used among young population (Kennedy, et al. 2008). This is because young people adopt technology faster than the rest of the population, they follow the latest advancements and developments earlier than other people do (Karaaslan & Budak, 2012). In addition to this, it was stated that 15 % of

American young population between the ages of 18-29 are mainly dependent on smart phones for internet access (Smith, 2015).

In a study conducted in Belarus, all (100%) students used mobile phones to make and receive calls. More than half (58.8%) of 94 respondents used mobile phones to send text messages. Almost 33% used the phones to take photos. Only 30 (18.8%) of the respondents used cellular phones for games and 41 (25.6%) used the phones to access to the Internet (Szpakow, Stryzhak & Prokopowicz, 2011).

However, the misuse and excessive use of the Internet bring about various physical, behavioral and psychological problems along with it. To give an example, individuals could be addicted to the Internet and consequently, they could have depression, low self-esteem, oversensitivity, guilt and despair. King et al. (2014) conducted a study in Brazil and examined the symptoms and emotional imbalances of the patients with panic attack due to the use of mobile phone. In an experimental study in which 120 people participated, it was found that both the experiment group including patients with panic disorder and the control group including healthy people exhibit "addiction" to mobile phones. However, it was reported that people with panic disorder are likely to show more intense emotional changes and physical and psychological symptoms in case of not using or reaching mobile phones.

Task persistence is also one of important aspect of psychological symptoms and Task persistence is a key aspect of cognitive performance and academic motivation and achievement, and also is linked with fewer behavioral and self-regulation problems such as those indicative of attention deficit disorders (Barkley, 1997; Jennings & Dietz, 2003).

Task persistence is a component of a larger system of self-regulated attention and behavior that comprises executive function and effortful control (Anderson, 2002). Our measure of task persistence captured effortful, sustained attention and shifting of attention, corresponding to widely used measures of attention focusing, shifting, and inhibitory control that are substantially inter-correlated with each other while being distinct from reactive control (i.e., impulsivity, inhibition to novelty; see Derryberry & Rothbart, 1997; Eisenberg & Morris, 2002; Kochanska & Knaack, 2003).

King et al. (2014) attributed to the studies claiming that mobile phone addiction indicate the existence of a primary disorder such as social phobia and dependent personality disorder. Samaha and Havi conducted a study on 300 university students and revealed a positive relationship between stress levels and smart phone addiction.

Moreover, some studies in the literature suggested that there is a negative relationship between students' academic performance and mobile phone use (Judd, 2014, Karpinski et al., 2013; Rosen et al., 2013, Samaha & Hawi, 2016; Wentworth & Middleton, 2014; Kibona & Mgaya, 2015). The constant checking and/or use of smartphones has been linked to sleep disturbances, stress, anxiety, deterioration in health, a decrease in academic and physical performance (Thomée, Härenstam, & Hagberg, 2011).

Spitzer (2015), who discussed the place of smart phone within the concept of M-learning, claimed they are mostly underestimated and drew the attention to the risks and side effects of smart phones in educational environments through the results obtained from 22 studies conducted in various countries. These risks and side effects include addiction, attention disorder, and empathy deficit disorder, a decrease in academic achievement because

of interrupted learning, high blood pressure, obesity, anxiety, depression, personality disorder, aggression, dissatisfaction and loneliness. In the literature, there are many psychological syndromes arising from problematic and excessive use of technology. One of the most important syndromes is insomnia, which has recently begun to take place in the literature and considered as the phobia of the 21st century.

A Second adverse effect of Media addiction is on the relationships that people have, as it decreases real physical and social interactions, and people isolate themselves in real life. Multimedia has become a way of life for most of the current young generations all over the world. Social media allows all kinds of nations to connect in ways that only a few years before seemed unthinkable to even the most advanced scientists. Yet now it has more influence on our lives than we could possibly imagine. Children as young as three years old have their own I Pads and can even manage iTunes accounts, whilst teenagers on average reportedly spend up to 7.5 hours on social media per day, according to a study conducted by the Kaiser Family Foundation (2013). Teenagers are even referred to nowadays as the 'Face book generation', implying that they use this social media website excessively- it's suggested that the average amount of time a person uses Face book per month is 15 hours 33 minutes. However the damage this social media usage is having on our health is greater than we have thought. Many people are suffering more from both depression and insomnia due to abusing the use of social media. In this article, we are going to explore the range of ways in which social media effects the risk of developing insomnia and depression, and how much of an influence it has on them.

In addition, the majority of them wake up at least once during the night and checks the messages and notifications. The results of the study demonstrated that “the anxiety of losing contact with others” and “the feeling of dependence on technology” could affect their sleep negatively so the students could be unproductive the next day and have difficulty in learning at university.

Ellis and Knaus (2002) perceived procrastination as the desire to avoid an activity, the promise to get it late, and the use of excuse making to justify the delay and avoid blame, while Popoola (2005) considered procrastination as a dispositional trait which has cognitive, behavioral and emotional components. Popoola (2005) further described the procrastinator as someone who knows what he wants to do in some sense, can do it, is trying to do it, yet doesn't do it. In this vein, a procrastinating student could more often than not be amenable to academics. That is, such a student would often not be committed to his/her studies. Solomon and Rothblum (1984) described them as people who tend to avoid tasks which they find unpleasant but rather engage in activities which are more rewarding, with short term over long term gain. Thus researcher interested to conduct such study which may focus the relationship among insomniac problems and internet and smart phone addiction behavior and its impact on procrastination behavior, task persistence and academic achievement.

1.2.0 EMERGENCE AND JUSTIFICATION OF THE STUDY

Keeping in contact through multimedia and mobile phones in social life starts in childhood period in most parts of the world (Karaaslan & Budak, 2012). Smart phones as a new mobile technology that change the patterns of social life eliminate social boundaries and existing forms. Technology age has brought mobile phones into a state of significance and it

has a great effect on the social and emotional development of adolescents. During the transition stages from childhood to adolescence, the use of media increases (Rideout et al., 2010). Most teenagers spend their time on electronic media platforms (Willemse et al., 2012). These technological devices, which are extremely popular among teenagers, also cause them to change their lifestyles and differ their way of establishing social relations; as a result, they restrict their lives within the borders of this technological world. However, teenagers think that the use of technology especially mobile phones improves their social status: Therefore, they feel more attached to them (Yilmaz, Sar & Civan, 2015). Kim et al. (2012) reported that adolescents have the tendency to concentrate while using media and can develop more habitual usage problems than adults when they are introduced to a new type of media. Besides, teenagers are more prone to smart phone addiction compared to adults (Kwon, & Yang, 2013).

Several studies show that young people and many college students mostly use their mobile devices for social networking, listening to music, watching videos and playing games and they consider smart phones mainly as a leisure device (Chen & Denoyelles, 2013; Lepp, Li & Barkley, 2015; Lepp, Barkley, Sanders, Rebold & Gates, 2013, Lepp, Barkley & Karpinski, 2015). In addition, smart phone use is a dominant and defining characteristic of this generation of college students and often occurs during class time, while completing homework, and studying (Smith, Raine & Zickuhr, 2011; Tindell & Bohlander, 2012). Although young individuals use smart phones and tablet computers mostly for accessing the Internet, social networking, listening to music and watching videos, mobile technologies have started to be used formally and informally in educational activities. Mobile devices are

particularly preferred for data storage, course materials, e-books, timetables and reaching information (Sarrab, 2015). Chen and Denoyelles (2013) have stated that mobile technologies increasingly play an important role in academic lives of university students.

Berson and Berson (2003) stated that internet is a resource that enables young individuals to reach information and do research; besides, it supports the development of some skills like problem solving, creativity and critical thinking. Likewise, it was reflected that the Internet in an academic sense is a very important tool for teenagers and adults in terms of instant reach of information and communication with others (Ko et al., 2012).

Dixit et al.(2004) was found that the participants stated that they could not survive a single day without a cell phone. In another study conducted with a group of 200 medical students between the ages of 17-28 in Indore, India, it was found that 18.5 % of the students exhibited phobic behaviors while haven't mobile phone. The 73 % of the students stated that they keep their mobile phones near them while sleeping and 20 % of them stated that they lose concentration and feel under pressure when they do not have their mobile phones or run out of battery.

Choy et al. (2007) explain that "specific phobia is characterized by an excessive, irrational fear of a specific object or situation, which is avoided at all cost or endured with great distress." Situational phobias are experienced when a specific situation evokes an intense, irrational fear that leads to an intense reaction that can be both physical and emotional.

King, Valença and Nardi (2010) reported in their study, they consider nomophobia as a 21st century disorder resulting from new technologies. In their definition, nomophobia

“denotes discomfort or anxiety when out of mobile phone (MP) or computer contact. It is the fear of becoming technologically incommunicable, distant from the MP or not connected to the Web”

Karaaslan & Budak, (2012) reported that keeping in contact through mobile phones in social life starts in childhood period in most parts of the world and Smartphones as a new mobile technology that change the patterns of social life eliminate social boundaries and existing forms. Technology age has brought mobile phones into a state of significance and it has a great effect on the social and emotional development of adolescents.

Kim et al. (2012) reported that adolescents have the tendency to concentrate while using media and can develop more habitual usage problems than adults when they are introduced to a new type of media.

International Business Times’ definition (2013) seems to put an emphasis on the feelings of anxiety caused by the unavailability or inaccessibility of mobile phones: phobia while haven't mobile phone is an anxiety which people face when they feel they could not get signal from a mobile tower, run out of battery, forget to take the phone with them or simply do not receive calls, texts or email notifications for a certain period of time. In short, it is a psychological fear of losing mobile or cell phone contact

Merlo et al. (2013) developed and validated a measure of problematic mobile phone use. The items in the questionnaire were created based on informal interviews with several mobile phone users who described themselves as addicted to their phones, DSM-IV criteria for substance use disorders, and a review of existing measures concerned with the excessive use of the Internet.

Cheever, Rosen, Carrier & Chavez (2014) a study carried out with the participation of 163 university students in the USA in 2014, almost half of the participants' mobile phones were taken and the other half were asked to turn their phones off and put them away. During the period without phones, anxiety scale was administered and results revealed that the participants' anxiety levels increased in this period.

Forgays et al. (2014) argue against the notion of mobile phone addiction, they seem to regard nomophobia as a term used to refer to mobile phone addiction. Nonetheless, the colloquial use of the term addiction seems to obscure the meaning of nomophobia. Rather, as its name implies, nomophobia, or no-mobile-phone phobia, may be better suited for classification as a phobia in general, and as a situational phobia in particular

Sharma, Sharma, Sharma & Wavare, (2015) examined the use of mobile phone and the prevalence of nomophobia among third year medical students. In this study in which 130 students between the ages of 22-24 participated, it was found that 73 % of the students were nomophobic and 83 % of the students had frequent and recurrent anxiety attacks or panic attacks when they could not find their mobile phones.

Spitzer's (2015) reported in his study and emphasis that there was the impact of negative experiences on academic success and school life due to technology dependence and nomophobia.

Rosen et al. (2016) studied with the participation of over 700 university students about the impact of technology on sleep pattern, it was pointed out that at least half of the participants sleep with their mobile phones on. In addition, the majority of them wake up at

least once during the night and checks the messages and notifications. The results of the study demonstrated that “the anxiety of losing contact with others” and “the feeling of dependence on technology” could affect their sleep negatively so the students could be unproductive the next day and have difficulty in learning at university.

Yang, Hwang, Hung and Tseng (2016) reported that recent improvements and advancements in mobile technologies provide opportunities for new educational experiences and the activities of acquiring information. This new educational experience and approach is called mobile learning because learning content is integrated into these mobile devices (Garry Wei-Han, Keng-Boon, Lai-Ying, & Binshan, 2014; Toteja & Kumar, 2012). It is a fact that the use of smartphones and the Internet makes our daily lives easier in every aspect.

It is seen that most of the studies in the literature were carried out over post graduate and doctoral students. However, the need for socializing in the youth stage when the personality is being developed has a priority and this need of communication is mostly achieved through smart phones and mobile internet in virtual platforms but not face-to-face. Consequently, it is thought that this can increase smart phone attachment and dependence of adolescents in youth so this can have a negative result like nomophobia and insomniac problems. there are very few studies such as Spitzer’s (2015) focused on relationship on insomniac problem with academic performance of the students, he stated that negative impact experiences was found on academic success and school life due to technology dependence. From the foregoing and array of literature cited that the studies based on insomniac problems among youth in relation to internet and smart phones addiction and

academic performance were not sufficient and not linked with procrastinatory behavior and task persistence which known as best predictor of academic achievement.

On the basis of related literature and its consequences, researcher framed such questions which is more relevant and will help to draw the tract of the present research and stated as under-

Research questions:

- Will any significant difference between male and female youth in relation to insomniac problems in the era of technology?
- Will any significant difference between male and female youth in relation to internet & smart phones addictive behavior in the era of technology?
- Will any significant relationship between insomniac problems and internet & smart phones addictive behavior of male and female youth in the era of technology?
- Will any significant difference between male and female youth in relation to procrastination behavior, task persistence and academic achievement?
- Will any significant impact of insomniac problems of youth on their procrastination behavior, task persistence and academic achievement?
- Will any significant impact of internet & smart phones addictive behavior of youth on their procrastination behavior, task persistence and academic achievement?

- Will any significant interactional impact of insomniac problems and internet & smart phones addictive behavior of youth on their procrastination behavior, task persistence and academic achievement?

Thus researcher decided to study the impact of insomniac problems and internet & smart phones addictive behavior of youth on their procrastination, task persistence and academic performance.

1.3.0TITLE OF THE RESEARCH:

IMPACT OF INSOMNIAC PROBLEMS AND INTERNET, SMART PHONES ADDICTIVE BEHAVIOUR OF YOUTH ON THEIR PROCRASTINATION, TASK PERSISTENCE AND ACADEMIC PERFORMANCE.

1.4.0 DEFINITION OF THE TERMS USED IN THE TITLE

1.4.1 INSOMNIAC PROBLEMS

Insomnia (Sharma, Sharma, Sharma & Wavare, 2015) includes a wide range of sleeping disorders, from lack of sleep quality to lack of sleep quantity. Insomnia is commonly separated into three types:

- **Transient insomnia** - occurs when symptoms last from a few days to a few weeks.
- **Acute insomnia** - also called short-term insomnia. Symptoms persist for several weeks.
- **Chronic insomnia** - this type lasts for months, and sometimes years. According to the National Institutes of Health, the majority of chronic insomnia cases are secondary, meaning they are side impacts or symptoms resulting from another primary problem.

Although insomnia can affect people of any age. The sleeping disorder can undermine school and work performance, as well as contributing to obesity, anxiety, depression, irritability, concentration problems, memory problems, poor immune system function, and reduced reaction time.

1.4.2 INTERNET & SMART PHONES ADDICTIVE BEHAVIOUR

Addiction usually refers to compulsive behavior that leads to negative impacts. In most addictions, people feel compelled to do certain activities so often that they become a harmful habit, which then interferes with other important activities such as work or school. In that context, internet and smart phones addiction could be considered someone with a compulsion to use social media, smart phone, video chat, messaging, songs etc to excess for hours on end.

1.4.3 PROCRASTINATION:

Procrastination is the tendency to delay or completely avoid responsibilities, decisions, or task that need to be done (Haycock,McCathy and Skay1998).

According to Lay (1986) Procrastination means the putting off of that which is necessary to reach some goal.

Procrastination is the behaviour or tendency to unnecessary delay or avoiding to the responsibilities or tasks such as regular assigned reading, studying for quizzes/tests/exams, writing papers and other assignments and general tasks.

1.4.4 TASK PERSISTENCE

Feather (1962) defines that “The general paradigm of the persistence situation is that in which a person is confronted with a very difficult or insoluble task and is unrestricted in either the time or number of attempts he can work at it.”

So we can say that Task persistence is a key aspect of cognitive performance and academic motivation and achievement, and also is linked with fewer behavioural and self regulation problems such as those indicative of attention deficit disorders.

1.4.5 ACADEMIC PERFORMANCE:

Academic achievement represents performance outcomes that indicate the extent to which a person has accomplished specific goals that were the focus of activities in instructional environments, specifically in school, college, and university. In the present research, CGPA in the running semester will be considered as academic performance of the students.

1.5.0 OBJECTIVES OF THE STUDY:

1. To explore and differentiate the levels of internet and smart phones addictive behavior in male and female youth at university level.
2. To explore and differentiate the insomniac problems of male and female youth at university level.
3. To study the impact of insomniac problems of youth on their procrastinatory behavior, task persistence and academic achievement.

4. To study the impact of internet and smart phone addictive behavior of youth on their procrastination behavior, task persistence and academic achievement.
5. To study the interactional impact of insomniac problems and internet & smart phone addictive behavior of youth on their procrastination, task persistence and academic achievement.

1.6.0 HYPOTHESIS OF THE STUDY:

1. There will be no significant difference between male and female youth in relation to their multimedia addictive behavior at university level.
2. There will be no significant difference between male and female youth in relation to their insomniac problems at university level.
3. There will be no significant impact of internet and smart phone addictive behavior of youth on their procrastination, task persistence and academic achievement.
4. There will be no significant interactional impact of insomniac problems and internet & smart phone addictive behavior of youth on their procrastination, task persistence and academic achievement.

1.7.0 RESEARCH DESIGN: Sample Units will be selected through Purposive Sampling method Sample will consist of 600 Students (300 Male and 300 Female) from the Faculty of Engineering, Dayalbagh Educational Institute (Deemed University) Dayalbagh Agra.

1.7.1 METHOD: Keeping the nature of the problem in mind, the researcher will follow the Descriptive Survey Method.

1.7.2 VARIABLES OF THE STUDY

1. Independent Variable:

- Insomniac problems
- Internet and smart phones addictive behavior

2. Dependent Variable:

- Procrastinatory behavior
- Task persistence
- Academic performance

3. Moderate Variable:

- Gender

1.7.3 SAMPLE UNITS: Sample Units will be selected through Purposive Sampling method. The Sample will consist of 600 Students (300 Male and 300 Female) from the Faculty of Engineering, Dayalbagh Educational Institute (Deemed University) Dayalbagh, Agra, and it will be selected through Stratified Random Sampling Method.

1.7.4 RESEARCH TOOLS: The following tools will be constructed and developed by Researcher.

Table 1.1: list of tools and their brief description

Sr. No	Name of tools	Constructed by	Nature
1	**Insomniac Problems**	Researcher	Rating scale will be constructed

	identification Scale		to indentify the sleeping quality and also tool will be developed through the standard steps of test construction.
2	**Internet and Smart Phones Addictive Behavior Scale**	Researcher	Researcher will report internet and smart Phones addictive behavior though rating scale regarding their uses of smart phone and internet.
3	**Procrastinatory Behavior**	Researcher	Researcher will construct the rating scale to indentify the delaying habits and avoid responsibilities, decisions or tasks
4	**Academic Performance**	Researcher	Percentage of marks or grade in previous year either in semester will convert in standard score (Z-score) which will be treated as academic performance

1.8.0 STATISTICAL TECHNIQUES: Both Descriptive and inferential statistical techniques will be applied as per nature of data.

1.9.0 DELIMITATIONS OF THE STUDY:

The study will be delimited in the following manner;

- The present study will be delimited with number of observed variables such as Insomniac Problems, Internet and Smart Phones Addictive Behavior,

Procrastinatory Behavior, Task persistence and academic achievement of the students.

- The present study will be delimited on Engineering Students of Faculty of Engineering Dayalbagh Educational Institute,(Deemed University) Dayalbagh Agra.
- The present study will be delimited with the number of the responders (sample units). Only 300 male and 300 female undergraduate students will be taken as sample in the present study.
- The present study will be delimited with its scope. The results can be generalized on youth of graduate level.
- The present study will be delimited with nature of the study. The present study is descriptive study.

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